Claims

1. An isolated promoter sequence derived from the telomerase RNA (TR) gene promoter, having approximately 505 bp upstream of the transcription start site or a fragment thereof, capable of initiating transcription of DNA operably linked downstream of said promoter.

2. An isolated promoter sequence according to claim 1 wherein the promoter sequence is construct hProm505 as shown in Fig 4a and Fig 5a.

3. An isolated promoter sequence according to claim 1 ~~or claim 2~~ wherein the promoter sequence is 230 bp in length starting at position -42 bp as shown in Fig 4a and Fig 5a upstream of the transcription start site.

4. An isolated promoter sequence according to ~~any one of the preceding claims~~ claim 1 having the sequence as shown in Fig 4a or mutant, allele, derivative or variant thereof.

5. An isolated promoter sequence according to ~~any one of the preceding claims~~ claim 1 operably linked to a heterologous nucleic acid coding sequence or a gene.

6. A nucleic acid construct comprising a promoter sequence according to ~~any one of claims 1 to 4~~ claim 1, operably linked to a heterologous gene.

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7. A nucleic acid construct according to claim 6 wherein the heterologous gene encodes a cytotoxin.

8. A vector comprising an isolated promoter sequence according to any one of claims 1 to 5 or a nucleic acid construct according to claim 6 or claim 7.

9. A host cell comprising an isolated promoter sequence according to any one of claims 1 to 5 or a vector according to claim 8.

10. A host cell comprising a nucleic acid construct according to claim 6 or claim 7.

11. A method comprising culturing a host cell according to claim 10 under conditions for transcription of said heterologous sequence from the promoter.

12. A method according to claim 11 wherein the heterologous sequence is a coding sequence and the host cell is cultured under conditions for expression of the encoded peptide or polypeptide product.

13. A method according to claim 10 or claim 11 comprising detection of transcription of the heterologous sequence or the encoded product.

14. A method of screening for ability of a substance to modulate activity of a TR promoter, the method comprising contacting an expression system containing a nucleic acid construct according to claim 6 with a test or candidate substance and determining transcription of the heterologous sequence or expression of the encoded peptide or polypeptide product.

15. A method according to claim 14 wherein the expression system comprises a host cell containing said nucleic acid construct.

16. A method which comprises, following identification of a substance having the ability to modulate activity of a TR promoter in accordance with a method according to claim 14 or claim 15, manufacture of the substance and/or use of the substance in manufacture or formulation of a composition.

17. A vector according to claim 8 for use in a method of gene therapy.

18. Use of a vector according to claim 8 in the preparation of a medicament for the treatment of cancer.

19. A system for use in the control of neoplasia in a human or animal subject comprising a vector or other

delivery system capable of selectively infecting tumour cells in said subject, said vector carrying a DNA or RNA sequence encoding an enzyme operably linked to a nucleic acid molecule according to ~~any one of claims 1 to 5~~ claim 1, in association with a prodrug capable of being converted to an active compound by action of said enzyme.

20. A system according to claim 19 wherein the vector is the gene therapy vector pGT62-codAupp.

21. A system according to claim 19 or 20 wherein the enzyme is viral thymidine kinase.

22. A system according to claim 19 or 21 wherein the prodrug is ganciclovir.

23. Use of a system according to ~~any one of claims 19~~ claim 19 to ~~22~~ in the preparation of a medicament for the treatment of neoplasia in a human or animal subject.

24. A method of treating neoplasia in a human or animal subject requiring such treatment comprising administering to the subject an effective amount of a prodrug and a modified virus capable of selectively infecting tumour cells in said subject, said virus carrying a DNA or RNA sequence encoding an enzyme capable of converting said produg to an active compound, wherein said DNA or RNA

a sequence is operably linked to a nucleic acid molecule according to claim 1 ~~any one of claim 1 to 5~~.

25. A method according to claim 24 wherein the enzyme is viral thymidine kinase and the prodrug is ganciclovir.

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